

REFERENCE NUMBER 2

0000008

REVISED FINAL REPORT

for

SAMPLING AND ANALYTICAL INVESTIGATIONS

at the

STACK PROPERTY
22ND STREET
CHICAGO, ILLINOIS

Presented to:

Karaganis and White, Ltd.
Chicago, Illinois

Submitted by:

MAECORP Incorporated
Chicago, Illinois

November 13, 1989

Report #IL-A013

EPA Region 5 Records Ctr.



229814

RECEIVED

NOV 14 1989

IEPA/CLPC

INTRODUCTION

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MAECORP Incorporated was requested by Karaganis and White, Ltd. to perform environmental sampling of soil and groundwater on the Stack property located in North Chicago on 22nd Street, between Commonwealth Avenue and Tantallum Place.

The purposes of this environmental sampling were to determine what environmental contamination may be present and how the fire started this past year.

BORINGS AND MONITORING WELL INSTALLATION

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Four borings were installed at the Stack site on January 5 and 6, 1989. Drilling was performed by Fox Drilling under subcontract to MAECORP Incorporated. Boreholes for all wells were drilled with a hollow-stem auger through the glacial material. Drill bits, augers, split spoons and the drill rig were steam-cleaned between boreholes to prevent cross-contamination. MAECORP personnel were on site to determine the exact location of borings.

Split Spoon Sampling

Continuous split-spoon sampling was conducted with a drill rig for all borings. Sampling was conducted with a hardened steel split-spoon containing a basket spring retainer that was held in place by a removable nosepiece. An AW drill rod receptacle-driver head cap was threaded to the top of the 18-inch split-spoon barrel. Lengths of the drill rod were then attached to the assembled split spoon, and the split spoon was driven 18 inches. When the sampler had reached the target depth, the sampler was retrieved, opened, and the contents placed in discrete glass sample jars. Resultant soil cores were evaluated by the geologist on site. Boring logs are included in this report.

Monitoring Well Installation

Each monitoring well was installed upon completion of the borehole. The wells were constructed of 2-inch outside diameter, flush-jointed, Schedule 40 threaded PVC casing. All monitoring

wells were constructed with 5 feet of 2-inch outside diameter, 0.010-inch machine-slotted PVC screen. Five-foot lengths were used to ensure that the potentiometric surface is present in the screen.

The annular space surrounding the screened interval in each well was filled with a filter pack consisting of fine graded silica sand. Formational sands were also used to form the filter pack when caving could not be controlled. The filter pack extends from the bottom of the borehole to 1 foot above the screened-in area.

A 2-foot pelletized bentonite seal was placed above the filter sand, followed by cement grout to the surface. The lockable, flush-mount, steel protective casing was then installed into the cement.

All wells were surveyed for exact location and elevation by a licensed registered surveyor. Boring locations may be found in Figure 1, and detailed installation logs are included in this report for all borings and monitoring wells.

Sampling

Soil samples were collected on February 5 and 6, 1989. Samples were kept in a 40-ml glass VOA vial and a 1-quart glass jar with a teflon lid. Water samples were taken on February 17, 1989. Wells were purged of three volumes of water to ensure a representative sample. Samples were collected using a 24-inch teflon bailer and collected in one brown 1-quart jar, one clear

1-quart jar, and two 40-ml VOA vials. Samples were hand-delivered to Tenco Laboratories. Laboratory analysis reports and chain-of-custody records are attached.

Decontamination

The following procedures were used for all equipment which came in direct or indirect contact with sample materials:

1. Wiped off all visual foreign material with a laboratory wipe.
2. Washed with warm, soapy alconox water.
3. Rinsed with deionized water.
4. Air-dried.

BORINGS AND MONITORING WELLS

BORINGS AND MONITORING WELLS

Boring 1

The first boring was located on the south part of the property next to the stream and 22nd Street. The boring was sampled by split spoon to a depth of 10.5 feet. The boring was sealed with bentonite and concrete to prevent vertical migration of possible contaminants. Seven 18-inch split spoons were taken and analyzed individually in the field. A composite sample was sent to a laboratory for analysis. Composite soil analysis from Boring 1 was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|
| Silver | 5.08 |
| Barium | 53.10 |
| Cadmium | 0.677 |
| Chromium | 7.22 |
| Mercury | 0.417 |
| Lead | 221.00 |

Boring 2

The second boring was located east of the gravel road dividing the property. The boring was sampled to 10.5 feet. Seven 18-inch split spoons were taken and analyzed individually in the field. A composite sample was sent for laboratory analysis. Composite soil analysis from Boring 2 was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|
| Silver | 2.43 |
| Barium | 525.00 |
| Cadmium | 9.46 |
| Chromium | 12.80 |
| Mercury | 0.350 |
| Lead | 3881.00 |
| Toluene | 0.0429 |

Boring 3

The third boring was located at the perimeter of the burn area. The boring was sampled to 10.5 feet. Seven 18-inch split spoons were taken and analyzed individually in the field. A composite sample was sent for laboratory analysis. Composite soil analysis from Boring 3 was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|
| Silver | 16.30 |
| Barium | 42.10 |
| Cadmium | 0.683 |
| Chromium | 10.80 |
| Mercury | 0.089 |
| Lead | 295.00 |

Boring 4

The fourth boring was located in the center of the burn area. The boring was sampled to 10.5 feet. Seven 18-inch split spoons were taken and analyzed individually in the field. A composite sample was sent for laboratory analysis. Composite soil analysis from Boring 4 was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|-----------------------|----------------------------|
| Silver | 4.50 |
| Barium | 20.10 |
| Chromium | 8.60 |
| Mercury | 0.189 |
| Lead | 20.70 |
| Methylene Chloride | 0.0312 |
| 1,1,1-Trichloroethane | 0.00512 |
| Trichloroethene | 0.0912 |
| PCB, Aroclor 1254 | 2.25 |

MONITORING WELLS

MONITORING WELLS

Monitoring Well 1

Monitoring Well 1, located in the second boring, was located east of the gravel road dividing the property. The well consisted of a 5-foot PVC screen connected to a PVC riser. Total depth of the well from the ground surface is 12.5 feet, and depth to groundwater in the well from the top of the casing was 10.33 feet. The top of the casing is at 651.83 feet above mean sea level. The top of the water table was calculated at 641.50 feet above mean sea level.

Groundwater from Monitoring Well 1 (MW-1) was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|
| Silver | 0.018 |
| Barium | 0.558 |
| Cadmium | 0.006 |
| Chromium | 0.212 |
| Mercury | 0.0043 |
| Lead | 1.56 |
| Selenium | 0.016 |

Monitoring Well 2

Monitoring Well 2 was located at the perimeter of the burn area. The well consisted of a 5-foot PVC screen connected to a PVC riser. Total depth of the well from the ground surface is 12.5 feet, and depth to groundwater in the well from the top of the casing was 9.92 feet. The top of the casing is at 650.55 feet above mean sea level. The top of the water table was calculated at 640.63 feet above mean sea level.

Groundwater from Monitoring Well 2 (MW-2) was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|
| Silver | 0.015 |
| Barium | 0.451 |
| Cadmium | 0.004 |
| Chromium | 0.157 |
| Mercury | 0.0222 |
| Lead | 2.01 |
| Selenium | 0.02 |

Monitoring Well 3

Monitoring Well 3 was located in the center of the burn area. The well consisted of a 5-foot PVC screen connected to a PVC riser. Total depth of the well from the ground surface is 12.5 feet, and depth to groundwater in the well from the top of the casing was 8.92 feet. The top of the casing is at 651.38 feet above mean sea level. The top of the water table was calculated at 642.46 feet above mean sea level.

Groundwater from Monitoring Well 3 (MW-3) was found to contain the following contaminants:

| <u>Parameter</u> | <u>Concentration (ppm)</u> |
|------------------|----------------------------|
| Silver | 0.003 |
| Barium | 0.125 |
| Chromium | 0.019 |
| Mercury | 0.0001 |
| Lead | 0.019 |
| Selenium | 0.015 |

LABORATORY RESULTS

LABORATORY RESULTS

Off-site laboratory analysis of the soil samples was performed by Tenco Laboratories, subcontracted to MAECORP Incorporated. Each composite soil sample was analyzed for: volatile organics, polynuclear aromatic hydrocarbons, PCB's, and RCRA metals (see Tables 3, 4, and 5).

CONCLUSION

CONCLUSION

Investigations performed on site included visual observations, soil sampling, soil borings, and the installation and sampling of three PVC monitoring wells. Causes for the previous site fire and contamination identified in the soil samples appear to be the result of cinders which were disposed by an unknown party. Visual contaminants in the storm sewer discharge may originate from EMCO Chemical Distributors. Discolored effluent was witnessed by MAECORP personnel.

Soil boring 4 in the burn area contained burnt rubber, brick pieces, and burnt soil in the top 18 inches to 2 feet below grade. Combining this and previous evidence, it is very likely that the fire was not of a chemical nature and was limited to surficial vegetation and their root systems.

Groundwater at this site is contaminated by metals from an unknown source. Since the area is surrounded by metal processing facilities, an outside source is suspected.

DRINKING WATER STANDARDS

DRINKING WATER STANDARDS

WATER

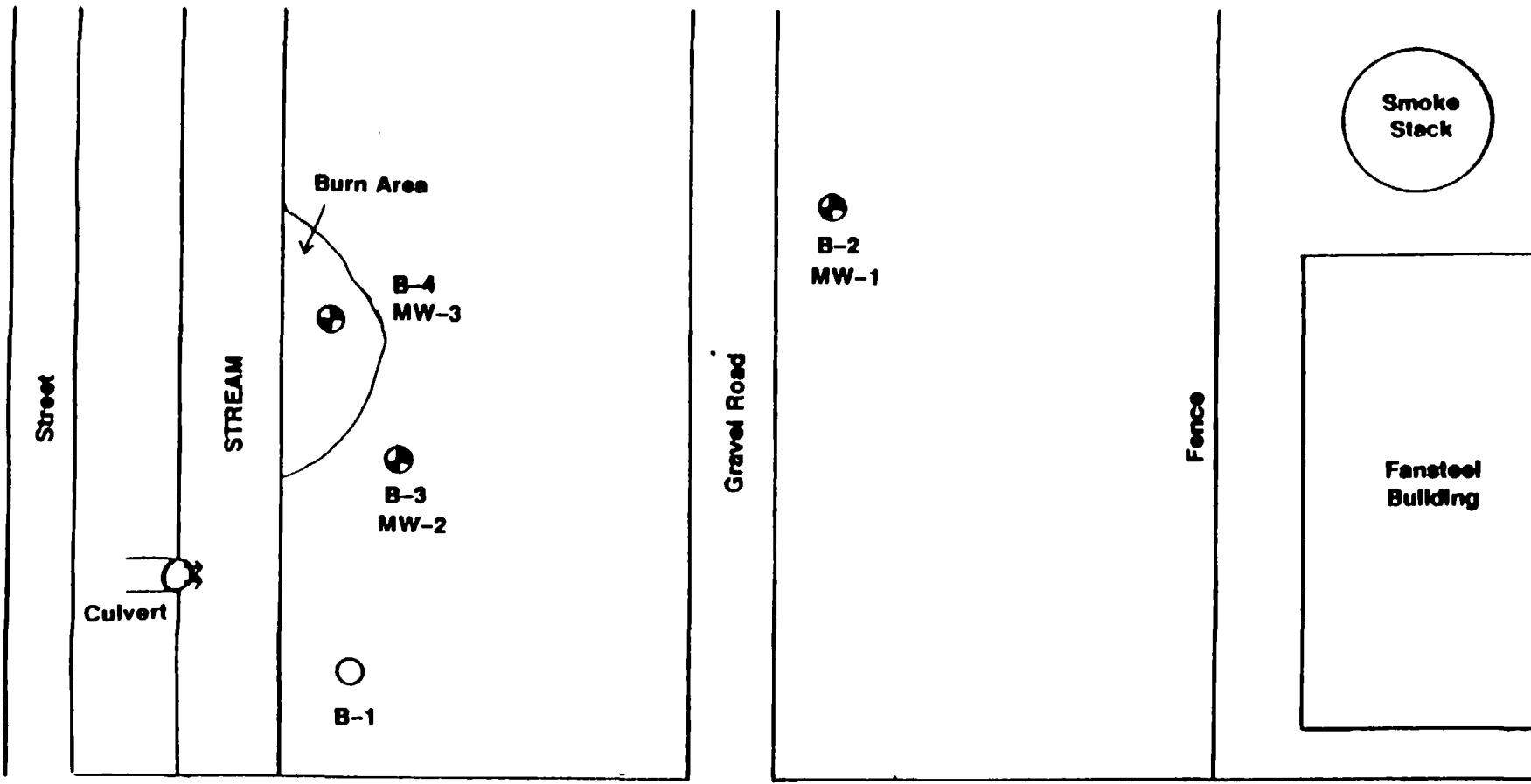
| <u>Parameter</u> | <u>Concentration (ppm)</u> | | | |
|------------------|----------------------------|-------------|-------------|-------------|
| | <u>Max Level*</u> | <u>MW-1</u> | <u>MW-2</u> | <u>MW-3</u> |
| Silver | 0.005 | 0.018 | 0.015 | 0.003 |
| Barium | 5.0 | 0.558 | 0.451 | 0.125 |
| Cadmium | 0.05 | 0.006 | 0.004 | ND |
| Chromium | 0.05 | 0.212 | 0.157 | 0.019 |
| Mercury | 0.0005 | 0.0043 | 0.0222 | 0.0001 |
| Lead | 0.1 | 1.56 | 2.01 | 0.019 |
| Selenium | 1.0 | 0.016 | 0.02 | 0.015 |

*General standards for the waters of the state of Illinois.

SOIL

| <u>Parameter</u> | <u>Concentration (ppm)</u> | | | |
|-----------------------|----------------------------|------------|------------|------------|
| | <u>Max Level</u> | <u>B-1</u> | <u>B-2</u> | <u>B-3</u> |
| Silver | 5.08 | 2.43 | 16.3 | 4.5 |
| Barium | 53.1 | 525.0 | 42.1 | 26.9 |
| Cadmium | 0.677 | 9.46 | 0.683 | ND |
| Chromium | 7.22 | 12.8 | 10.8 | 8.60 |
| Mercury | 0.417 | 0.35 | 0.089 | 0.189 |
| Lead | 221.0 | 3881.0 | 295.0 | 20.7 |
| Toluene | ND | 0.0429 | ND | ND |
| Methylene Chloride | ND | ND | ND | 0.0312 |
| 1,1,1-Trichloroethane | ND | ND | ND | 0.00512 |
| Trichloroethene | ND | ND | ND | 0.0912 |
| PCB, Aroclor 1254 | ND | ND | ND | 2.25 |

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KEY

- Monitoring Well Locations
 - Boring Locations

22nd Street

MAECORP Incorporated

| | | |
|---------------|--------------------|--------------|
| SCALE: None | APPROVED BY: RL | DRAWN BY DCK |
| DATE: 1-20-89 | | REVISED |

Boring and Well Locations

TABLE 2
COMPATABILITY TESTS
IL-A013

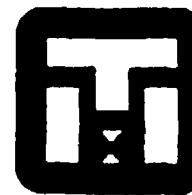
| SAMPLE NUMBER | pH | BURNABILITY | HNU READING (ppm) | SOLUBILITIES | | | | | | | |
|------------------|----|-------------|----------------------|--------------|--------|----------|---------|----------|----------|----------|---------|
| | | | | WATER | HEXANE | METHANOL | ACETONE | OXIDIZER | PEROXIDE | CYANIDE | SULFUR |
| B1-01 | 8 | negative | 0.4 | S | PS | S | S | negative | negative | negative | negativ |
| B1-02 | 7 | negative | 0.4 | S | PS | S | S | negative | negative | negative | negativ |
| B1-03 | 7 | negative | 0.4 | S | NS | PS | PS | negative | negative | negative | negativ |
| B1-04 | 7 | negative | 0.0 | S | NS | S | S | negative | negative | negative | negativ |
| B1-05 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B1-06 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B1-07 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-01 | 8 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-02 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-03 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-04 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-05 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-06 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B2-07 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-01 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-02 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-03 | 8 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-04 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-05 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-06 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B3-07 | 7 | negative | 0.4 | S | NS | S | S | negative | negative | negative | negativ |
| B4-01 | 7 | negative | 7.0 | PS | PS | PS | PS | negative | negative | negative | negativ |
| B4-02 | 7 | negative | 7.0 | S | PS | S | S | negative | negative | negative | negativ |
| B4-03 | 7 | negative | 5.0 | PS | NS | NS | NS | negative | negative | negative | negativ |
| B4-04 | 7 | negative | 4.0 | PS | NS | PS | PS | negative | negative | negative | negativ |
| B4-05 | 7 | negative | 2.0 | S | NS | S | S | negative | negative | negative | negativ |
| B4-06 | 7 | negative | 1.0 | S | NS | S | S | negative | negative | negative | negativ |
| B4-07 | 7 | negative | 0.2 | S | NS | S | S | negative | negative | negative | negativ |

TENCO LABORATORIES

BPM INDUSTRIES

1150 Junction Avenue - Schererville, Indiana 46375

1-219-322-2560 • 1-800-428-3311



REPORT TO:
Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60430

Date: 1/23/89

Recd: 1/09/89

WO #: 21-0830

IL-A013

EPA METHOD 601,602,603

| Laboratory Samp ID No.: | 3527-9 | 3528-9 | 3529-9 | 3530-9 | 3531-9 | | |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|--|--|
| DESCRIPTION: —> less otherwise noted; parts per billion - ppb | IL-A013-B1- C1 | IL-A013-B2- C1 | IL-A013-B4- C1 | IL-A013-B4- C1 | IL-A013-B4- C2 | | |
| PARAMETERS: ↓ | Boring 1 | Boring 2 | Boring 3 | Boring 4 | Boring 4 | | |
| ROLEIN | ND | ND | ND | ND | ND | | |
| ACRYLONITRILE | ND | ND | ND | ND | ND | | |
| ENZENE | ND | ND | ND | ND | ND | | |
| BROMODICHLOROMETHANE | ND | ND | ND | ND | ND | | |
| BROMOFORM | ND | ND | ND | ND | ND | | |
| BROMOMETHANE | ND | ND | ND | ND | ND | | |
| CARBON TETRACHLORIDE | ND | ND | ND | ND | ND | | |
| CHLOROBENZENE | ND | ND | ND | ND | ND | | |
| CHLOROETHANE | ND | ND | ND | ND | ND | | |
| -CHLOROETHYL VINYL ETHER | ND | ND | ND | ND | ND | | |
| CHLOROFORM | ND | ND | ND | ND | ND | | |
| CHLOROMETHANE | ND | ND | ND | ND | ND | | |
| BROMOCHLOROMETHANE | ND | ND | ND | ND | ND | | |
| 1-DICHLOROETHANE | ND | ND | ND | ND | ND | | |
| 2-DICHLOROETHANE | ND | ND | ND | ND | ND | | |
| 1,1-DICHLOROETHENE | ND | ND | ND | ND | ND | | |
| trans-1,2-DICHLOROETHENE | ND | ND | ND | ND | ND | | |

ND=Not Detected at 5 ppb

D.J.D.

TENCO LABORATORIES

BPM INDUSTRIES

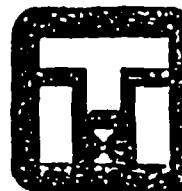
1150 Junction Avenue - Schererville, Indiana 46375

1-219-322-2560 • 1-800-428-3311

Page 1B

REPORT TO:

**Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60430**



IL-A013
EPA METHODS 601.602.603

Date: 1/23/89

Recd: 1/09/89

401 1: 21-0830

ND=Not Detected at 5 ppb.

TE..CO ..BL..AT..IE

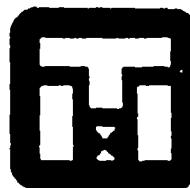
Page 3A

BPM INDUSTRIES

1150 Junction Avenue - Schererville, Indiana 46375

1-219-322-2560 • 1-800-428-3311

REPORT TO:
 Freddie Walker
 MAECORP
 17450 South Halsted
 Homewood, IL 60430



Date: 1/23/89

Recd: 1/09/89

WO #: 21-0830

IL-A013

EPA METHODS 606,607,609,610,611,612

| Laboratory Samp ID No.: | 3527-9 | 3528-9 | 3529-9 | 3530-9 | 3531-9 | |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--|
| Sample Description Unless otherwise noted, results in ppb | IL-A013-B1-C1 Soil Boring 1 | IL-A013-B2-C1 Soil Boring 2 | IL-A013-B3-C1 Soil Boring 3 | IL-A013-B4-C1 Soil Boring 4 | IL-A013-B4-C2 Soil Boring 4 | |
| CENAPHTHENE | ND | ND | ND | ND | ND | |
| CENAPHTHYLENE | ND | ND | ND | ND | ND | |
| VTHRACENE | ND | ND | ND | ND | ND | |
| ENZIDINE | ND | ND | ND | ND | ND | |
| ENZO(A)ANTHRACENE | ND | ND | ND | ND | ND | |
| ENZO(A)PYRENE | ND | ND | ND | ND | ND | |
| ENZO(B)FLUORANTHENE | ND | ND | ND | ND | ND | |
| ENZO(K)FLUORANTHENE | ND | ND | ND | ND | ND | |
| ENZO(G, H, I)PERYLENE | ND | ND | ND | ND | ND | |
| ENZYL BUTYL PHTHALATE | ND | ND | ND | ND | ND | |
| IS(2-CHLOROETHYOXY)METHANE | ND | ND | ND | ND | ND | |
| IS(2-CHLOROETHYL)ETHER | ND | ND | ND | ND | ND | |
| IS(2-CHLOROISOPROPYL)ETHER | ND | ND | ND | ND | ND | |
| IS(2-ETHYLHEXYL)PHTHALATE | ND | ND | ND | ND | ND | |
| -BROMOPHENYL PHENYL ETHER | ND | ND | ND | ND | ND | |
| -CHLORONAPHTHALENE | ND | ND | ND | ND | ND | |
| -CHLOROPHENYL PHENYL ETHER | ND | ND | ND | ND | ND | |
| HRYSENE | ND | ND | ND | ND | ND | |
| I BENZO(A,H)ANTHRACENE | ND | ND | ND | ND | ND | |

ND=Not Detected at 100 ppb.

Certified by:

TENCO LABORATORIES

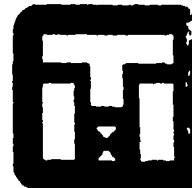
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REPORT TO:
 Freddie Walker
 MAECORP
 17450 South Halsted
 Homewood, IL 60430

IL-A013



EPA METHODS 606,607,609,610,611,612

Date: 1/23/89

Recd: 1/09/89

WO #: 21-0830

| Laboratory Samp ID No.: | 3527-9 | 3528-9 | 3529-9 | 3530-9 | 3531-9 |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Sample Description Unless otherwise noted, results in ppb | IL-A013-B1-C1 Soil Boring 1 | IL-A013-B2-C1 Soil Boring 2 | IL-A013-B3-C1 Soil Boring 3 | IL-A013-B4-C1 Soil Boring 4 | IL-A013-B4-C2 Soil Boring 4 |
| ,2-DICHLOROBENZENE | ND | ND | ND | ND | ND |
| ,3-DICHLOROBENZENE | ND | ND | ND | ND | ND |
| ,4-DICHLOROBENZENE | ND | ND | ND | ND | ND |
| ,3-DICHLOROBENZIDINE | ND | ND | ND | ND | ND |
| ETHYLPHthalATE | ND | ND | ND | ND | ND |
| METHYLPHthalATE | ND | ND | ND | ND | ND |
| I-N-BUTYLPHthalATE | ND | ND | ND | ND | ND |
| ,4-DINITROTOLUENE | ND | ND | ND | ND | ND |
| ,6-DINITROTOLUENE | ND | ND | ND | ND | ND |
| I-N-OCTYLPHthalATE | ND | ND | ND | ND | ND |
| LUORANTHENE | ND | ND | ND | ND | ND |
| LUORENE | ND | ND | ND | ND | ND |
| EXACHLOROBENZENE | ND | ND | ND | ND | ND |
| EXACHLOROBUTADIENE | ND | ND | ND | ND | ND |
| EXACHLOROCYCLOPENTADIENE | ND | ND | ND | ND | ND |
| EXACHLOROETHANE | ND | ND | ND | ND | ND |
| NDENO (1,2,3-CD)PYRENE | ND | ND | ND | ND | ND |

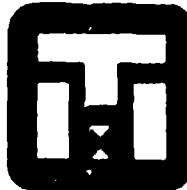
ND=not Detected at 100 ppb.

Certified by:

REPORT TO:

Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60430

BPM INDUSTRIES
1150 Junction Avenue - Schererville, Indiana 46375
1-219-322-2560 • 1-800-428-3311



Date: 1/23/89
Recd: 1/09/89
W# #: 21-0830

IL-A013

Certified by: D. D. Pugh

ENCL. OF...OIS

BPM INDUSTRIES

1150 Junction Avenue - Schererville, Indiana 46375

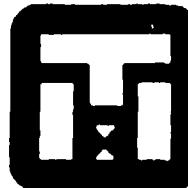
1-219-322-2560 • 1-800-428-3311

REPORT TO:

**Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60431**

IL-A013

KPA METHOD SW 846-8080



Date: 1/23/89

Recd: 1/09/89

21-0830

ND=Not Detected at 0.10 mg/kg.

Certified by:

Dale D. Lach

Sample Number

139455

10
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Laboratory Name Will County Laboratories, Inc.
Lab Code WASIL Case No. 1
Matrix (soil/water) Water
Sample weight/volume 880 (g/ml) ml
Level (low/medium) Medium
% Moisture (Not Dec.) NA deg.
Extraction (SopF/Cet/Benz) SEPF
HPLC Cleanup (Yes/No) NO pH 7

Contract # _____
SAB No. 1 _____ SDB No. 1 _____
Lab Sample ID: _____
Lab File ID: _____
Date Received: _____
Date Extracted: 9/16/88
Date Analyzed: 9/19/88
Dilution Factor: 1

CONCENTRATION UNITS

| CAS # | COMPOUND | CONCENTRATION | UNITS |
|------------|---------------------|---------------|-------|
| 319-84-6 | Alpha-BHC | 0.05 | PPB |
| 319-85-7 | Beta-BHC | 0.05 | PPB |
| 319-86-8 | delta-BHC | 0.05 | PPB |
| 58-87-9 | gamma-BHC (Lindane) | 0.05 | PPB |
| 76-44-9 | Heptachlor | 0.05 | PPB |
| 309-00-2 | Aldrin | 0.05 | PPB |
| 1024-57-3 | Heptachlor epoxide | 0.05 | PPB |
| 959-98-9 | Endosulfan I | 0.05 | PPB |
| 60-57-1 | Dieldrin | 0.10 | PPB |
| 72-53-9 | 4,4'-DDE | 0.10 | PPB |
| 72-20-9 | Endrin | 0.10 | PPB |
| 33213-65-9 | Endosulfan II | 0.10 | PPB |
| 72-54-8 | 4,4'-DDD | 0.10 | PPB |
| 1031-07-9 | Endosulfan sulfate | 0.10 | PPB |
| 50-29-3 | 4,4'-DDT | 0.10 | PPB |
| 72-43-5 | Methoxychlor | 0.5 | PPB |
| 53494-70-5 | Endrin ketone | 0.10 | PPB |
| 5103-71-9 | alpha-Chlordane | 0.5 | PPB |
| 5103-74-2 | gamma-Chlordane | 0.5 | PPB |
| 8001-35-2 | Toxaphene | 1.0 | PPB |
| 12674-11-2 | Aroclor-1016 | 0.5 | PPB |
| 11104-28-2 | Aroclor-1221 | 0.5 | PPB |
| 11141-16-5 | Aroclor-1232 | 0.5 | PPB |
| 53469-21-9 | Aroclor-1242 | 0.5 | PPB |
| 12672-29-6 | Aroclor-1248 | 0.5 | PPB |
| 11097-69-1 | Aroclor-1254 | 1.0 | PPB |
| 11096-82-5 | Aroclor-1260 | 1.0 | PPB |
| | Total PCBs | 1.0 | PPB |

IA
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE

139455

Lab Name: GULF COAST LABORATORIES Contract: 000

Lab Code: WESIL Case No.: ---- SAS No.: ---- SDG No.: ----

Matrix: (soil/water) water Lab Sample ID: 139455

Sample wt/vol: 5 (g/mL) mL Lab File ID: >MAE01

Level: (low/med) low Date Received: 9/06/88

% Moisture: not dec. Date Analyzed: 9/14/88

Column: (pack/cap) pack Dilution Factor: 1.000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|---------|----------|----------------------|------|
| | | (ug/L or ug/Kg) | ug/L |

| | | |
|--|-----|----|
| 74-87-3-----Chloromethane | 10. | IU |
| 74-83-9-----Bromomethane | 10. | IU |
| 75-01-4-----Vinyl Chloride | 10. | IU |
| 75-00-3-----Chloroethane | 10. | IU |
| 75-09-2-----Methylene Chloride | 54. | I |
| 67-64-1-----Acetone | 25. | I |
| 75-15-0-----Carbon Disulfide | 5. | IU |
| 75-35-4-----1,1-Dichloroethane | 5. | IU |
| 75-34-3-----1,1-Dichloroethane | 5. | IU |
| 540-59-0-----1,2-Dichloroethene (total) | 52. | I |
| 67-66-3-----Chloroform | 5. | IU |
| 107-02-2-----1,2-Dichloroethane | 5. | IU |
| 78-93-3-----2-Butanone | 10. | IU |
| 71-55-6-----1,1,1-Trichloroethane | 5. | I |
| 56-23-5-----Carbon Tetrachloride | 5. | IU |
| 108-05-4-----Vinyl Acetate | 10. | IU |
| 75-27-4-----Bromodichloromethane | 5. | IU |
| 78-87-5-----1,2-Dichloropropene | 5. | IU |
| 10061-01-5-----cis-1,3-Dichloropropene | 5. | IU |
| 79-01-6-----Trichloroethene | 19. | I |
| 124-48-1-----Dibromochloromethane | 5. | IU |
| 79-00-5-----1,1,2-Trichloroethane | 5. | IU |
| 71-43-2-----Benzene | 5. | IU |
| 10061-02-6-----trans-1,3-Dichloropropene | .5. | IU |
| 75-25-2-----Bromoform | 5. | IU |
| 108-10-1-----4-Methyl-2-pentanone | 10. | IU |
| 591-78-6-----2-Hexanone | 10. | IU |
| 127-18-4-----Tetrachloroethene | 5. | IU |
| 79-34-5-----1,1,2,2-Tetrachloroethane | 5. | IU |
| 108-88-3-----Toluene | 5. | IU |
| 108-90-7-----Chlorobenzene | 5. | IU |
| 100-41-4-----Ethylbenzene | 5. | IU |
| 100-42-5-----Styrene | 5. | IU |
| 133-02-7-----Xylene (total) | 5. | I |

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

139455

Lab Name: GULF COAST LABORATORIES Contract: 000

Lab Code: WESIL Case No.: ---- SAS No.: ---- SDG No.: ----

Matrix: (soil/water) water Lab Sample ID: 139455

Sample wt/vol: 5 (g/mL) mL Lab File ID: >MAE01

Level: (low/med) low Date Received: 9/06/88

Moisture: not dec. Date Analyzed: 9/14/88

Column: (pack/cap) pack Dilution Factor: 1.00000

CONCENTRATION UNITS:

| CAS NO. | COMPOUND | (ug/L or ug/Kg) | ug/L | Q |
|---------|----------|-----------------|------|---|
|---------|----------|-----------------|------|---|

| | | | |
|---|--|------|---|
| 107-02-8-----Acrolein_____ | | 100. | U |
| 107-13-1-----Acrylonitrile_____ | | 100. | U |
| 75-71-8-----Dichlorodifluoromethane_____ | | 20. | U |
| 542-88-1-----Bis(chloromethyl)ether_____ | | 20. | U |
| 75-69-4-----Trichlorofluoromethane_____ | | 10. | U |
| 110-75-8-----2-Chloroethyl vinyl ether_____ | | 10. | U |
| | | | - |

FORM I VOA

1/87 Rev

18
SEMIQUANTITATIVE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

139455

Lab Name: GULF COAST LABS

Contract: -----

Lab Code: WESIL

Case No.: -----

SAS No.: -----

SDG No.: -----

Matrix: (soil/water) WATER

Lab Sample ID: 139455

Sample wt/vol: 850 (g/mL) mL

Lab File ID: >MAE50

Level: (low/med) LOW

Date Received: 09/06/88

% Moisture: not dec. - dec. -

Date Extracted: 09/07/88

Extraction: (Sepf/Cont/Sonic) SEPF

Date Analyzed: 9/19/88

GPC Cleanup: (Y/N) NO pH: -----

Dilution Factor: 1.00000

CONCENTRATION UNITS:

| CAS NO. | COMPOUND | (ug/L or ug/Kg) | ug/L | Q |
|---------|----------|-----------------|------|---|
|---------|----------|-----------------|------|---|

| | | | | |
|--|--|-----|----|--|
| 108-95-2-----Phenol | | 10. | 10 | |
| 111-44-4-----bis(2-Chloroethyl)Ether | | 10. | 10 | |
| 95-57-8-----2-Chlorophenol | | 10. | 10 | |
| 541-73-1-----1,3-Dichlorobenzene | | 10. | 10 | |
| 106-46-7-----1,4-Dichlorobenzene | | 10. | 10 | |
| 100-51-6-----Benzyl alcohol | | 10. | 10 | |
| 99-50-1-----1,2-Dichlorobenzene | | 10. | 10 | |
| 95-48-7-----2-Methylphenol | | 10. | 10 | |
| 39638-32-9-----bis(2-chloroisopropyl)ether | | 10. | 10 | |
| 106-44-5-----4-Methylphenol | | 10. | 10 | |
| 621-64-7-----N-Nitroso-O-n-propylamine | | 10. | 10 | |
| 67-72-1-----Hexachloroethane | | 10. | 10 | |
| 98-95-3-----Nitrobenzene | | 10. | 10 | |
| 78-59-1-----Isophorone | | 10. | 10 | |
| 88-75-5-----2-Nitrophenol | | 10. | 10 | |
| 105-67-9-----2,4-Dimethylphenol | | 10. | 10 | |
| 65-85-0-----Benzoic acid | | 50. | 10 | |
| 111-91-1-----bis(2-Chloroethoxy)methane | | 10. | 10 | |
| 120-83-2-----2,4-Dichlorophenol | | 10. | 10 | |
| 120-82-1-----1,2,4-Trichlorobenzene | | 10. | 10 | |
| 91-20-3-----Naphthalene | | 10. | 10 | |
| 106-47-8-----4-Chloraniline | | 10. | 10 | |
| 87-68-3-----Hexachlorobutadiene | | 10. | 10 | |
| 59-50-7-----4-Chloro-3-methylphenol | | 10. | 10 | |
| 91-47-6-----2-Methylnaphthalene | | 10. | 10 | |
| 77-47-4-----Hexachlorocyclopentadiene | | 10. | 10 | |
| 88-116-2-----2,4,6-Trichlorophenol | | 10. | 10 | |
| 95-98-4-----2,4,5-Trichlorophenol | | 50. | 10 | |
| 41-68-7-----2-Chloronaphthalene | | 10. | 10 | |
| 98-74-4-----2-Nitroaniline | | 50. | 10 | |
| 131-11-3-----Dimethylphthalate | | 10. | 10 | |
| 298-96-8-----Acenaphthylene | | 10. | 10 | |
| 606-70-2-----2,6-Dinitrotoluene | | 10. | 10 | |

1C
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: GULF COAST LABS

Contract: -----

Lab Code: WESIL Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: (soln)/water) WATER

Lab Sample ID: 139455

Sample wt/vol: 850 (g/mL) mL

Lab File ID: >MAE50

Level: (low/med) LOW

Date Received: 09/06/88

% Moisture: not deo.- dec. -

Date Extracted: 09/07/88

Extraction: (Sopf/Cont/Sonic) SEPFI

Date Analyzed: 9/19/88

GPC Cleanup: (Y./N) NO pH: -----

Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) | ug/L | Q |
|----------------|----------------------------|---|------|---|
| 99-09-2----- | 3-Nitroaniline | 50. | IU | |
| 83-32-9----- | Acenaphthene | 10. | IU | |
| 51-28-5----- | 2,4-Dinitrophenol | 50. | IU | |
| 100-02-7----- | 4-Nitrophenol | 50. | IU | |
| 132-64-9----- | Dibenzofuran | 10. | IU | |
| 121-14-2----- | 2,4-Dinitrotoluene | 10. | IU | |
| 84-66-2----- | Diethylphthalate | 10. | IU | |
| 7005-72-3----- | 4-Chlorophenyl-phenylether | 10. | IU | |
| 96-73-7----- | Fluorene | 10. | IU | |
| 100-01-6----- | 4-Nitroaniline | 50. | IU | |
| 534-52-1----- | 4,6-Dinitro-2-methylphenol | 50. | IU | |
| 86-30-6----- | N-Nitrosodiphenylamine (1) | 10. | IU | |
| 101-55-3----- | 4-Bromophenyl-phenylether | 10. | IU | |
| 118-74-1----- | Hexachlorobenzene | 10. | IU | |
| 87-86-5----- | Pentachlorophenol | 50. | IU | |
| 85-01-8----- | Phenanthrene | 10. | IU | |
| 120-12-7----- | Anthracene | 10. | IU | |
| 84-74-2----- | Di-n-butylphthalate | 1. | I | 3 |
| 206-44-0----- | Fluoranthene | 10. | IU | |
| 129-00-0----- | Pyrene | 10. | IU | |
| 85-68-7----- | Butylbenzylphthalate | 10. | IU | |
| 91-94-1----- | 3,3'-Dichlorobenzidine | 20. | IU | |
| 56-55-3----- | Benz(a)anthracene | 10. | IU | |
| 218-01-9----- | Chrysene | 10. | IU | |
| 117-81-7----- | bis(2-Ethylhexyl)phthalate | 11. | I | 8 |
| 117-84-0----- | Di-n-octylphthalate | 10. | IU | |
| 205-99-2----- | Benz(b)fluoranthene | 10. | IU | |
| 207-08-9----- | Benz(k)fluoranthene | 10. | IU | |
| 50-32-8----- | Benz(a)pyrene | 10. | IU | |
| 193-39-6----- | Indeno(1,2,3-cd)pyrene | 10. | IU | |
| 53-70-3----- | Dibenz(a,h)anthracene | 10. | IU | |
| 191-24-2----- | Benz(g,h,i)perylene | 10. | IU | |

(1) - Cannot be separated from Diphenylamine

18
SEMIQUVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

139455

Sample Name: GULF COAST LARS

Contract: -----

Code#: WESIL

Case No.: -----

SRS No.: -----

SDG No.: -----

Matrix (soil/water) WATER

Lab Sample ID: 139455

Sample wt/vol: 850 (g/mL) ML

Lab File ID: 139455

Sample: (low/med) LOW

Date Received: 09/06/88

Moisture: not dec.-

dec. -

Date Extracted: 09/07/88

Reaction: (Sepf/Cont/Sono) SEPF

Date Analyzed: 09/19/88

PC Cleanup: (Y/N) NO

pH: -----

Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | | |
|---------|------------------------|----------------------|------|---|
| | | (ug/L or ug/Kg) | ug/L | Q |
| ----- | N-Nitrosodimethylamine | 10. | 1U | 1 |
| ----- | 1,2-Diphenylhydrazine | 10. | 1U | 1 |
| ----- | Benzidine | 100. | 1U | 1 |
| ----- | 3-Methylphenol (1) | 1U. | 1U | 1 |
| ----- | Dioxin (2) | NA | 1 | 1 |

(1) Screened by MC4 108,107,79 Ion Search.

(2) Screened by Method 625. Federal Register 49:209.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

139455

Lab Name: GULF COAST LABS

Contract: -----

Lab Code: WESIL Case No.: ----- SAS No.: ----- SDG No.: -----

Matrix: (soil/water) WATER

Lab Sample ID: 139455

Sample wt/vol: 850 (g/mL) ML

Lab File ID: >MAE50

Level: (low/med) LOW

Date Received: 09/06/88

% Moisture: not dec.- dec. -

Date Extracted: 09/07/88

Extraction: (Sppf/Cent/Sanc) SEPF

Date Analyzed: 9/19/88

GPC Cleanup: (Y/N) NO pH: -----

Dilution Factor: 1.00000

CONCENTRATION UNITS:

(ug/L OR ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.62 | 10 | J_8 |
| 2. | 1,1,2,2-TETRACHLOROETHANE | 8.52 | 6 | J |
| 3. | UNKNOWN | 8.66 | 48 | J_8 |
| 4. | UNKNOWN | 8.98 | 10 | J |
| 5. | UNKNOWN | 9.43 | 80 | J |
| 6. | UNKNOWN | 12.51 | 7 | J |
| 7. | UNKNOWN | 17.11 | 6 | J |
| 8. | UNKNOWN | 17.40 | 6 | J |
| 9. | UNKNOWN | 17.60 | 6 | J |
| 10. | UNKNOWN | 24.18 | 5 | J |
| 11. | UNKNOWN | 28.84 | 17 | J |
| 12. | UNKNOWN | 36.78 | 6 | J |
| 13. | UNKNOWN | 37.42 | 5 | J |
| 14. | | | | |
| 15. | | | | |
| 16. | | | | |
| 17. | | | | |
| 18. | | | | |
| 19. | | | | |
| 20. | | | | |
| 21. | | | | |
| 22. | | | | |
| 23. | | | | |
| 24. | | | | |
| 25. | | | | |
| 26. | | | | |
| 27. | | | | |
| 28. | | | | |
| 29. | | | | |
| 30. | | | | |

1150 Junction Avenue - Schererville, Indiana 46375
1-219-322-2560 • 1-800-428-3311

REPORT TO:
Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60430



Date: 2/28/89
Recd: 2/20/89
W# #: 21-1171

PROJECT IL-A013

| Laboratory Samp ID No.: | 4360-9 | 4361-9 | 4362-9 | 4363-9 | | | |
|--|----------------|-----------------|----------------|----------------|----------------------|--------------------|--|
| DESCRIPTION: —> <small>[Unless otherwise noted; results in parts per million - ppm]</small> | BLK 1:10 pm | MW1 12:40 pm | MW2 1:45 am | MW3 1:00 pm | | | |
| PARAMETERS: | 2/17/89 | 2/17/89 | 2/17/89 | 2/17/89 | | | |
| Silver | <0.002 | 0.018 | 0.015 | 0.003 | | | |
| Arsenic | <0.010 | <0.010 | <0.010 | <0.010 | | | |
| Barium | <0.050 | 0.558 | 0.451 | 0.125 | | | |
| Cadmium | <0.002 | 0.006 | 0.004 | <0.002 | | | |
| Chromium | <0.004 | 0.212 | 0.157 | 0.019 | | | |
| Mercury | <0.0001 | 0.0043 | 0.0222 | 0.0001 | | | |
| Lead | <0.008 | 1.56 | 2.01 | 0.019 | | | |
| Selenium | <0.01 | 0.016 | 0.02 | 0.015 | | | |
| TOC | <1 | 59 | 39.6 | 11.3 | | | |
| | | | | | MAECORP INCORPORATED | | |
| | | | | | DATE REC'D. | NO | |
| | | | | | DATE ANALYZED | NO | |
| | | | | | DATE | 03/03/89 | |
| | | | | | SIGNED | <i>Fred Walker</i> | |

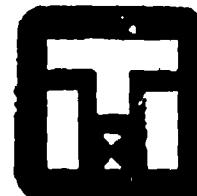
cont'd X has

1150 Junction Avenue

REPORT TO:

**Freddie Walker
MABCORP INC
17450 S Halsted St
Homewood IL 60430**

1-219-322-2560 • 1-800-428-3311



Date: 3/08/89

3/08/89

Recd: 2/20/89

2/20/89

404: 21-1171

21-1171

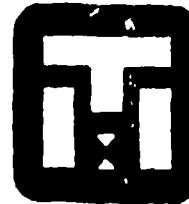
KPA METHOD 608 PROJECT IL A013

| Laboratory Sample ID No.: | 4360-9 | 4361-9 | 4362-9 | 4363-9 | | |
|---|----------------|-----------------|----------------|----------------|-----------------|--|
| DESCRIPTION: —> (unless otherwise noted; results in parts per billion - ppb) | BLK 1:10 pm | MW1 12:40 pm | MW2 1:45 am | MW3 1:00 pm | | |
| PARAMETERS: | 2/17/89 | 2/17/89 | 2/17/89 | 2/17/89 | | |
| PCB's as: | | | | | | |
| AROCHLOR 1016 | ND | ND | ND | ND | | |
| AROCHLOR 1221 | ND | ND | ND | ND | | |
| AROCHLOR 1232 | ND | ND | ND | ND | | |
| AROCHLOR 1242 | ND | ND | ND | ND | | |
| AROCHLOR 1248 | ND | ND | ND | ND | | |
| AROCHLOR 1254 | ND | ND | ND | ND | | |
| AROCHLOR 1260 | ND | ND | ND | ND | | |
| | | | | | ND | |
| | | | | | ND | |
| | | | | | 03-08-89 | |
| | | | | | Lorellie Walker | |

ND=Not Detected at 1ppb

Certified by: Shelia S. Rogers

REPORT TO:
Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60430



Date: 2/28/89
Recds: 2/20/89
WQ #: 21-1171

PROJECT IL-A013

| Laboratory Sample ID No.: | 4360-9 | 4361-9 | 4362-9 | 4363-9 | | | |
|--|----------------|-----------------|----------------|----------------|--|--|--------------------|
| <u>DESCRIPTION:</u> —> [Unless otherwise noted; results in parts per billion - ppb] | BLK 1:10 pm | MW1 12:40 pm | MW2 1:45 am | MW3 1:00 pm | | | Detectio Limits |
| <u>PARAMETERS:</u> | 2/17/89 | 2/17/89 | 2/17/89 | 2/17/89 | | | |
| Acenaphthene | ND | ND | ND | ND | | | 18 ppb |
| Acenaphthylene | ND | ND | ND | ND | | | 10 ppb |
| Anthracene | ND | ND | ND | ND | | | 6.6 ppb |
| Benzo(a)anthracene | ND | ND | ND | ND | | | 0.13 ppb |
| Benzo(b)fluoranthene | ND | ND | ND | ND | | | 0.18 ppb |
| Benzo(a)pyrene | ND | ND | ND | ND | | | 0.23 ppb |
| Benzo(ghi)perylene | ND | ND | ND | ND | | | 0.76 ppb |
| Benzo(k)fluoranthene | ND | ND | ND | ND | | | 1.5 ppb |
| Chrysene | ND | ND | ND | ND | | | 1.5 ppb |
| Dibenzo(a,h)anthracene | ND | ND | ND | ND | | | 0.3 ppb |
| Fluoranthene | ND | ND | ND | ND | | | 2.1 ppb |
| Fluorene | ND | ND | ND | ND | | | 2.1 ppb |
| Indeno(1,2,3-cd)pyrene | ND | ND | ND | ND | | | 0.43 ppb |
| Naphthalene | ND | ND | ND | ND | | | 10 ppb |
| Phenanthrene | ND | ND | ND | ND | | | 6.4 ppb |
| Pyrene | ND | ND | ND | ND | | | 2.7 ppb |

ND=Not Detected

cont. X bus

7 8 9 10 11 12

INCULABORATORIES

BPM INDUSTRIES

1150 Junction Avenue - Schererville, Indiana 46375

1-219-322-2560 • 1-800-428-3311

REPORT TO:
 Freddie Walker
 MAECORP
 17450 South Halsted
 Homewood, IL 60430



PROJECT IL-A013

EPA METHOD 601,602,603

Date: 2/28/89
 Recd: 2/20/89
 WO #: 21-1171

| Laboratory Samp ID No.: | 4360-9 | 4361-9 | 4362-9 | 4363-9 | | | |
|---|----------------|-----------------|----------------|----------------|--|--|--|
| DESCRIPTION: —> Unless otherwise noted, results in parts per million - ppb | BLK 1:10 pm | MW1 12:40 pm | MW2 1:45 am | MW3 1:00 pm | | | |
| PARAMETERS: | 2/17/89 | 2/17/89 | 2/17/89 | 2/17/89 | | | |
| ACROLEIN | ND | ND | ND | ND | | | |
| ACRYLONITRILE | ND | ND | ND | ND | | | |
| BENZENE | ND | ND | ND | ND | | | |
| BROMODICHLOROMETHANE | ND | ND | ND | ND | | | |
| BROMOFORM | ND | ND | ND | ND | | | |
| BROMOMETHANE | ND | ND | ND | ND | | | |
| CARBON TETRACHLORIDE | ND | ND | ND | ND | | | |
| CHLOROBENZENE | ND | ND | ND | ND | | | |
| CHLOROETHANE | ND | ND | ND | ND | | | |
| 2-CHLOROETHYL VINYL ETHER | ND | ND | ND | ND | | | |
| CHLOROFORM | ND | ND | ND | ND | | | |
| CHLOROMETHANE | ND | ND | ND | ND | | | |
| DIBROMOCHLOROMETHANE | ND | ND | ND | ND | | | |
| 1,1-DICHLOROETHANE | ND | ND | ND | ND | | | |
| 1,2-DICHLOROETHANE | ND | ND | ND | ND | | | |
| 1,1-DICHLOROETHENE | ND | ND | ND | ND | | | |
| trans-1,2-DICHLOROETHENE | ND | ND | ND | ND | | | |

BPM INDUSTRIES
1150 Junction Avenue - Schererville, Indiana 46375
1-219-322-2560 • 1-800-428-3311

REPORT TO:
Freddie Walker
MAECORP
17450 South Halsted
Homewood, IL 60430



**PROJECT IL-A013
EPA METHODS 601,602,603**

Date: 2/28/89
Recd: 2/20/89
W# 1: 21-1171

ND=Not Detected at 1 ppb.

MAECORP INCORPORATED
17450 S. Halsted Street
Hawood, IL 60430

CH.....-01 JUSTICE RELEIVED

CHAIN OF CUSTODY

No 003668

RECEIVING ENTITY TencO
ENTITY CONTACT/PHONE _____

MAECORP JOB SITE PHONE _____

PROJECT LOCATION

North Chicago

NAME OF CLIENT

Northern Trust Bank

PROJECT TELEPHONE NUMBER

PROJECT NUMBER

IL-A013

| ITEM NUMBER | SAMPLE NUMBER | NUMBER & SIZE OF CONTAINERS | DESCRIPTION | TRANSFER NUMBER & CHECK | | | | | | |
|-------------|---------------|---|--|-------------------------|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | IL-A013-B1-C1 | 1-QA Jar 7-VOA Vials 1-250ml Jars | Soil Composite from Boring 1 7 VOA vials w/ sample # IL-A013-B1-01 to C7 make up IL-A013-B1-C1 (Please composite them) | ✓ | | | | | | |
| 2 | IL-A013-B2-C1 | " | Soil Composite from Boring 2 7 VOA vials w/ sample # IL-A013-B2-C1 to O7 make up IL-A013-B2-C1 (Please composite them) | | ✓ | | | | | |
| 3 | IL-A013-B3-C1 | " | Soil Composite from Boring 3 7 VOA vials w/ sample # IL-A013-B3-C1 to O7 make up IL-A013-B3-C1 (Please composite them) | | | ✓ | | | | |
| 4 | IL-A013-B4-C1 | " | Soil Composite from Boring 4 7 VOA vials w/ sample # IL-A013-B4-C1 to O7 make up IL-A013-B4-C1 (Please composite them) | | | | ✓ | | | |
| 5 | IL-A013-B4-C2 | 1-QA Jar 1-250ml Hunter Jar 1-250ml Jar | Soil Composite from Boring 4 Send results to: Freddie Walter c/o MAECORP PC# 25919 - ILA013. | | | | | ✓ | | |

Person Responsible for Sample

Katie Dignan

MAECORP

Date

1/2/89

Time

1:37PM

TRANSFER NUMBER

1

ITEM NUMBER

1-5

TRANSFERS RELINQUISHED BY

Katie Dignan

ACCEPTED BY

DATE

TIME

Purpose of analysis (use back of front sheet if necessary)

VOC's
PNH's

PCB's

SRCPA Metals (tot)

MAECORP INCORPORATED

17450 S. Halsted Street
Homewood, IL 60430

CHAIN-OF-CUSTODY RECORD

CHAIN-OF-CUSTODY

No 004793

RECEIVING ENTITY

Tina L. Lee

ENTITY CONTACT/PHONE

MAECORP JOB SITE PHONE

| PROJECT LOCATION | | NAME OF CLIENT | | PROJECT TELEPHONE NUMBER | | PROJECT NUMBER | | | | | | | |
|--|-------------------|--|----------|--------------------------|-----------------|-------------------------|---------------------------|---|-------------|---|---|----------|----------|
| 17450 S. Halsted Chicago | | Northern Trust Bank | | | | IL 60430 | | | | | | | |
| ITEM NUMBER | SAMPLE NUMBER | NUMBER & SIZE OF CONTAINERS | | DESCRIPTION | | TRANSFER NUMBER & CHECK | | | | | | | |
| | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 1 | 10A212- 10A213 | 2 Vaseline White 1 lg. plastic 1 lg. Amber | | water | | | | | | | | | |
| 2 | 10A212- 10A213 | 2 Vaseline White 1 lg. plastic 1 lg. Amber | | | | | | | | | | | |
| 3 | 10A212- 10A213 | 2 Vaseline White 1 lg. plastic 1 lg. Amber | | | | | | | | | | | |
| 4 | 10A212- 10A213 | 2 Vaseline White 1 lg. plastic 1 lg. Amber | | | | | | | | | | | |
| 5 | 10A212- 10A213 | 1 qt. Tare 1 Vaseline White | | Northern Trust Bank | | | | | | | | | |
| 6 | 10A212- 10A213 | 1 qt. Tare 1 Vaseline White | | Northern Trust Bank | | | | | | | | | |
| 7 | 10A212- 10A213 | 1 qt. Tare 1 Vaseline White | | Northern Trust Bank | | | | | | | | | |
| Person Responsible for Sample | | Affiliation | Date | Time | TRANSFER NUMBER | ITEM NUMBER | TRANSFERS RELINQUISHED BY | | ACCEPTED BY | | | DATE | TIME |
| Tina L. Lee | | MAECORP | 10/12/93 | 10:00 AM | 10A214 | Tina Lee | Tina Lee | | Tina Lee | | | 10/12/93 | 10:00 AM |
| Purpose of analysis (use back of front sheet if necessary) | | | | | | | | | | | | | |
| Pb (610) | | | | | | | | | | | | | |
| Pb, As | | | | | | | | | | | | | |
| PCB | | | | | | | | | | | | | |
| Total metals | | | | | | | | | | | | | |
| Pb (601, 602, 603, 604, 605, 607, 611, 612) | | | | | | | | | | | | | |